

subject of the ancestry of birds and their affinities within the Class, and to this truth the Owls form no exception.

I have made and published numerous photographs from life of the Barred Owl and other species of the *Strigida*, but the figures illustrating the present article have never heretofore appeared in any ornithological publication, and, in the case of Figure 2, anywhere at all.

BIRDS OF A CANADIAN PEAT BOG.

BY C. W. G. EIFRIG.

A Canadian peat bog is a thing at once sought and delighted in, and on the other hand shunned and abhorred. It is shunned and avoided by nearly all classes of human society, that know of nothing but work, the amassing of money, and of pleasure in the old, accepted sense of the word. Such people cannot understand why a person should go to such an uninviting place, where one is drenched from underneath by water, visible or invisible in the deep moss, and also by the perspiration, wrung out of a person by the hot sun, under which one has to wade through the deep vegetation, without being able to walk in the shade. Add to this the hordes of mosquitoes, lack of drinking water, the distances one usually has to tramp, often enough in wet clothing, etc., makes a condition of things which to invade without necessity, yes, even to find pleasure and profit in, seems to them nothing short of a sign of a serious affection of the brain. And yet, naturalists of several kinds, the botanist, entomologist, particularly the ornithologist, congratulate themselves, when they have such a bog in their neighborhood, and go there as often as they have an opportunity.

Six miles east of Ottawa, the beautiful Capital of Canada and the former place of residence of the writer, there is such a bog of ample dimensions and bogginess, called the Mer Bleue. It is about ten miles long by one to four miles wide,

and is situated between the Ottawa-Montreal branch of the Canadian Pacific and Grand Trunk railways. There is farming country all around, terminating in low ridges or rounded bluffs at the margin of the bog, showing plainly its lacustrine origin. Some of these ridges in fact penetrate into the bog from the western end or from the sides, and here and there in the bog are elevations of rock and solid earth, evidently islands of a former time. Into this bog the writer has made incursions in June, July and August of nearly every summer during the six years of his residence here. One cannot go much before June, as the water is then too deep; and, as the breeding species of birds have then not yet settled down, it would not be so profitable.

Like most, if not all peat bogs, also this one has a zone or fringe of quite different appearance than the bog itself. It is a fringe of typical *swamp*, not bog, with much — uncomfortably much, visible water. This fringe of swamp, in most places only twenty-five to fifty feet in width, is effectual in keeping out all but the most ardent naturalists. Here we find the typical swamp flora, alder, cat-tail, poplar, bog-bean, *Lysimachia thyrsiflora*, etc. The typical birds of this section are, the Red-winged Blackbird, with a few Bronzed Grackles mixed in, also the Swamp Sparrow, Yellow Warbler and in some of the poplar stands is found the Nashville Warbler. Now and then a Bittern or even a Great Blue Heron is made to rise and heavily wing away. Also Soras and Virginia Rails are found in here, as well as a few loudly rasping, scolding Short-billed Marsh Wrens (*Cistothorus stellaris*). Of these the Yellow-throat and Nashville Warbler are also found in the bog proper.

The appearance of the bog is such as to at once arouse attention. The vegetation is so different from that of any other kind of territory, that one is almost forced to understand that the biological conditions obtaining here are markedly different from those of most other places. The covering underneath, into which the foot sinks deeply, consists of sphagnum moss, one of the characteristic plants of the peat

bog. In most places water gathers at once around the foot in the moss, which is like a sponge soaked full of water. Soon the eye is attracted by the odd leaves and flowers of the pitcher plant (*Sarracenia purpurea*), most of whose leave-pitchers, bristle-beset, are filled with water also. When one comes upon a colony of large, luxuriant pitcher-plants, it is a sight not soon forgotten, during the spell of which, while gazing on, one is apt to forget all about birds. Besides sphagnum the characteristic peat bog flora consists of such thick-leaved, glaucous bushes as *Cassandra*, *Chamaedaphne calyculata*, *Andromeda glaucophylla*, *Kalmia proliifolia*, *Ledum groenlandicum*, different kinds of huckle- and blueberries, also large and small cranberries. Here and there are a number of small, stunted black spruce and tamarack trees, which in places form thickets, with now and then a patch of deciduous bushes, as *Cornus*, alder, viburnum, etc., between. In such patches are found the Canadian and Chestnut-sided Warblers, also a few Magnolia and Blackburnian Warblers.

But these are not the characteristic bog birds. Out in the open, where grow small, dwarfed spruces, with much space between them, we hear a song much like that of the Pine Warbler, or Chipping Sparrow. There the bird is perching in a spruce. It turns out to be a Yellow Palm Warbler, *Dendroica palmarum hypochrysea*. The Palm Warbler, *D. palmarum*, also occurs in the region, but apparently only as a migrant, and it seems as if *hypochrysea* arrives here before *palmarum*, as a nest of the former, containing four eggs, was found as early as May 23, (1908). Here, where single stems of wooly-headed *Eriphorum callitris* stick up from the sphagnum, and, in August, the beautiful White-fringed Orchis, *Habenaria blephariglottis*, is also the home of the White-throated Sparrow. His slow, measured song of various numbers of syllables can be heard on all sides. Canadians make it say, *Dear, dear, Canada, Canada, Canada*. Once, while resting from the laborious, heavy walking or wading under a hot sun, one struck up his tune near me, and,

having note book and pencil in hand, I noted down the number of syllables, with this result:

Four times a song of three syllables.

Once a song of four syllables.

Once a song of five syllables.

Twice a song of six syllables.

Once a song of seven syllables.

Twice a song of nine syllables.

Once a song of ten syllables.

All this in less than fifteen minutes. Here, in the open spruce and tamarack stands, may also be heard the songs of the Hermit Thrush and the Veery, *Hylocichla guttata palasi* and *H. fuscescens*, often during the greatest heat of mid-day. Of other thrushes I have seen only one Wood Thrush, and, strangely enough, the Bluebird. Beside *Zonotrichia albicollis* the following members of the finch and sparrow family are met with: the Song Sparrow, Swamp Sparrow, Chipping Sparrow, many Goldfinches, and a few Juncos.

In such a paradise for mosquitoes, flies, and moths, as a peat bog is, flycatchers are to be expected. And accordingly, on the various visits, I found no less than seven species here. Out in the alder fringe, which is repeated around every "island," the Alder Flycatcher, *Empidonax trailli alnorum* is to be heard more than seen. This species certainly knows how to keep out of sight. In the open bog the twittering song and rapidly vibrating form of our old orchard acquaintance, the Kingbird, may be heard and seen. This is a rather common species here. June 16, 1905, I found a nest in a cavity on top of a stump of a small spruce, containing three eggs, with very little nesting material in the cavity. At the edge of some of the taller and denser spruce thickets may be heard the *Hood take care*, of the Olive-sided Flycatcher, *Nuttalornis borealis*, a bird extremely partial to black spruces, preferably at the edge of some open water. If one is fortunate he may also hear another flycatcher call, similar to that of the Pewee, but richer in quality, resembling in that the Crested Flycatcher. This is the elusive Yellow-bellied Fly-

catcher, *Empidonax flaviventris*, in his breeding haunts. To me his call sounds, *Doi de wôit!* The mosquitoes, however, are too thick, the spruces too dense, and the heat too great in the thickets, to look for nests. When going to an island in the bog, the only places where one may sit down without getting wet, and eat his lunch, the other members of the flycatcher family may be seen, the Crested, the Pewee and even the Phoebe. Here also the Canadian Ruffed Grouse, *Bonasa umbellus togata*, may be flushed, and the Nashville Warbler, *Termivora rubricapilla*, heard to sing his little ditty, *Chippa chippa chippa chit churr*, or, *tshewit, tshewit, trr*. Other common *terra firma* species here, are the Purple Finch, Rose-breasted Grosbeak, Northern Flicker, Red-eyed Vireo, Redstart and Black-throated Blue Warbler, *Dendronica caerulescens*.

However, the thicket where lives the Yellow-bellied Flycatcher harbors another interesting tenant. He announces himself by a very unusual song. This is a thin, high, wiry performance, reminding one at once of the songs of the Black and White, Blackpoll, and Nashville Warblers. But this has a queer, ventriloquial quality about it, one never knows where it emanates from. It sounds as if it started on the interior of the tree, and, rapidly accelerating, it become a little louder, as if the bird came out along the branch to its end. This is the Golden-crowned Kinglet, also in its breeding haunts. To look for a nest here, would be like looking for the proverbial needle in the haystack. The Black and White Warbler is found here also.

The flycatchers, however, are not the only ones reaping a rich harvest from the innumerable insects flying about during a warm sunny day. Those past masters in the art of flying, the Chimney Swifts, Nighthawks, Barn and Tree Swallows, and even Cedar Waxwings are found plying the same trade. The Barn Swallows and Swifts, of course, come from the adjoining farms, unless there are some hollow trees large enough for nesting and lodging quarters for the latter on one or the other of the islands; in the bog there are none.

The tree swallows rest in the alder-poplar fringe on the margin and around the islands. The Cedarbirds later on, when the berries ripen, reap a rich harvest in them. Toward the end of August these various large and small berry-bearing shrubs, such as high and low huckleberries, large and small cranberries and blueberries *Viburnum alniifolium*, *Nemopanthis mucronata*, etc., are fairly alive with birds. Then the Cedarbird is in its glory, but also the Robin, Catbird, Brown Thrasher, Flicker and others invade the bog and share in the rich feast. Then also the Myrtle Warbler, *Dendroica coronata*, is more apparent than earlier in the season; it breeds here sparingly and its soft, babbling little warble, *Whit, whit whit whit drrrr*, something like the Nashville Warbler, is seldom heard.—Of the wren family, the House Wren only is by no means rare in the bog; and in the spruces Blue Jays and Chickadees are frequently heard or seen.

Of birds of prey, I have seen comparatively few. Now and then a Marsh Hawk gets up and circles overhead to watch the movements of the intruder. But the Sharp-shinned Hawk, *Accipiter velox*, seems to prefer the little, thickly branched spruces found here for his nesting sites. On June 3, 1909, I found the rather bulky nest of a pair in the top of a small spruce, about twelve feet up, with four eggs. The female stayed on till the ascent was begun, then she flew off noiselessly. Not so noiseless, however, were a pair or two in a stand of larger spruces at the eastern end of the bog, near some fine *Arctostaphylos bulbosa* and *Pogonia ophioglossoides*. These had the young ones out of the nest—it was August 23,—and resented any intrusion with loud protests, showing little fear of me.

Another interesting feature in connection with visits to the bog, is to see how on different days in the summer months, the different birds in turn predominate, or make themselves most apparent. While at one time the White-throats are most noticeable, and the Yellow Palm Warblers are out of sight, the next time the reverse may be the case. Thus on August 5, 1909, *hypochrysea* was very apparent.

wandering with their fully grown young even on the farming land adjoining the bog. On some days the Cedar Waxwings play the leading role, then the Kingbirds, another time the Tree Swallows or even the Song Sparrow. Thus the peat bog, so dreary and monotonous to the uninitiated, presents many delightful and varying aspects and pictures to the devotees of nature-lore, who venture into it.

TWO SPECIES NEW TO THE A. O. U. CHECK-LIST.

BY W. F. HENNINGER.

In the "Dansk Ornithol. Foren Tidsskrift IV" on page 130 there is an article by O. Helms entitled: "Nye Arter for Oest-groenland," which mentions four species new to East Greenland, *Marila marila*, *Falco peregrinus*, *Colymbus griseigenus* and *Totanus totanus*. There is no particular interest attached to the first two, but the other two, *Totanus totanus* and *Colymbus griseigenus* are new to the A. O. U. Check-List. The former has a hypothetical record for North America, but this is the first time we have a positive record, while the second one has never before been recorded from the neararctic region. I propose that these two species be therefore added to the A. O. U. Check-List and interpolated at the proper places.